# Work Order ID 50173

July 9, 2009 3:10:50 PM

July 2, 2002 .	J. 10. JU 1 W												
Item ID: Revision ID:	D3012-5			Refe	erence:			: : ':==== = : = : = = = = = = = = = = =					
Item Name:	Decal												
Start Date:	7/10/09	Start Qty:	30.00	Cust	t Item ID:								
Required Da	te: 7/13/09	Req'd Qty:		Cust	tomer ID:				Cu	stomer Na	me:		
Approvals:	Process P	lan: 'Y09/07/0°	7_ Date:		Tooling:		Da	te:					
	QC:		Date:		SPC (Y/N):		Da	te:					
		** **** ******************************			Hou	rs							
Sequence ID	Work Center ID	Operation Description			Set Up	Run	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Rev	vision Nbr			-								
D3012	Rev	/ A											
100	Purchasing				0.00	0.00				CZ	08/67	749 (=	30)
Purchasing	Memo	PURCHASING Issue P/O: 1004 Make as per Dwg D3 Manufacture from 3M Material release note	012 I 7mil masking film p	o/n 8522C	CP					COL	<u> </u>	<i>(</i> 2)	
110 Packaging	Packaging	Receive & Inspect for	Damage & Mat'l Certs	3	0.00	0.00				R	9/1/	10 3	, o
	Memo	Ensure Material Relea	ase Note is attached								,		
120 Quality Con	QC ntrol	QC6- Inspect dimension	ons to drawing		0.00	0.00	3 (=	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	7/13	(0 m	<b>L</b>	<u> </u>	
,	Memo						,	-	, ,				
130 Packaging	Packaging	Identify as per dwg & S	Stock Location:	2	0.00	0.00				9/7	13	80	25¢
	Memo										`		

### Work Order ID 50173

July 9, 2009 3:10:50 PM

Quality Control

Memo

Item ID: D3012-5 Reference: Revision ID: A Item Name: Decal **Start Date:** 7/10/09 **Start Qty: 30.00 Cust Item ID:** Required Date: 7/13/09 Req'd Qty: 30.00 **Customer ID: Customer Name:** Approvals: Tooling: **Process Plan:** Date: Date: QC: Date: SPC (Y/N): Date: Hours Sequence Work Operation Accept Reject Reject Insp. Draw Draw Plan Set Up ID Description Run Qty Number Stamp Center ID Number Qty Rev. Code 140 QC QC21- Final Inspection - Work Order Release 0.00 0.00

h 91.07.13

Status

## **Picklist Print**

July 9, 2009 3:10:49 PM

Work Order ID: 50173

Parent Item:

D3012-5RevA

Parent Item Name: Decal

**Comments:** 



**Start Date:** 7/10/09

Required Date: 7/13/09

**Start Qty: 30.00** 

Required Qty: 30.00

Component Item ID/	Replacement	Mfg/	Bin	Primary	Last	Route	Unit of	Qty on	Remaining	Qty	Date
Item Name	Item ID	Purch	Item	Location	Location	Seq ID	Measure	Hand	Qty To Pick	Issued	Issued
D3012-5PRevA		Purchased	No			110	Each	0.0000	30.0000		

Decal





DESIG	in P	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHEC	KEO A	APPROVED	DRAWING NO.	EV. A
	·	A Comment	D3012 SHEET 1	OF 1
DATE			TITLE	SCALE
01.	03.30		DECAL	1:1
Α		01.03.30	NEW ISSUE	



- POINT A -SWL=300lb/136kg DO NOT USE WITH POINT B P/N D3012-1

D3012-1

- POINT B -SWL=500lb/227kg DO NOT USE WITH POINT A OR C P/N D3012-3

D3012-3

- POINT C -SWL=300lb/136kg DO NOT USE WITH POINT B P/N D3012-5 D3012-5

> Cd09107/09 W10'. 50173

MATERIAL: WHITE LETTERS ON BLACK ADHESIVE BACK MANUFACTURED FROM 3M 7 MIL MASKING FILM #8522CP

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210 MAIN W.,

HAWKESBURY, ONT. K6A 2H6

Tel.: 613 632-2001 ...
Fax: 613 632-9491 ...
www.studiolettrage.com

INVOICE / FACTURE

No.:

12424

DATE:

07/10/2009

PAGE

1 of 1

Re: Quote No. 7276

VENDU À: SOLD TO:

> Dart Aerospace Ltd 1270 Aberdeen

Hawkesbury, Ontario K6A 1K7

LIVRÉ À: SHIPPED TO:

Dart Aerospace Ltd

Hawkesbury, Ontario

ITEM QTY ARTICLE QYÉ	UNIT UNITÉ	DESCRIPTION	 i	GST TPS	PST TVP	UNIT PRICE PRIX UNITÉ	AMOUNT MATNOM
			* :				
30	D3012 set up	-5p printing	'	G E	1 30	.6667 .0000	50.00 30.00
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udio de Lettrage GST: #869034	4678RP001						
O 10044						TOTAL	84.00

Sold By:

Merci! Thank You!

#### **Product Bulletin 8522**

**3M** 

Release F, Effective January 2003 Black bar in margin indicates a change

# Scotchcal <sup>™</sup> Opaque Imaging Media 8522

# **Description**

This media is specially formulated to dry quickly after printing. Production of outdoor weatherable and long-term indoor durable graphics is now easier than ever. Its changeable adhesive allows easy removal for up to one year.

#### **Advantages**

- Optimized for use with selected Epson Stylus Proprinters and Epson Archival inks.
- Optimized for use with selected HP DesignJet Printers and HP DesignJet Ink System UV or HP83UV Color Ink System
- For making opaque, laminated graphics that are outdoor weatherable and long-term indoor durable
- Media:
  - For opaque (reflective) graphics
  - Changeable, easy to remove from warranted substrates up to 1 year later
  - Dries quickly after printing so the overlaminate can be applied almost immediately
  - Low slippage paper liner for superior tiling
- Overlaminates:
  - Provide additional UV (ultraviolet) and physical protection for making weatherable finished graphics
  - Available in luster and matte gloss
  - Adhesive allows for heat-assisted or cold-temperature lamination

#### **Applications and Uses**

3M<sup>™</sup> Scotchcal<sup>™</sup> Changeable Opaque Imaging Media 8522 is intended only for ink jet printing and for use with the listed Compatible Products and Equipment and the following applications. Any other application is NOT warranted by 3M or covered by the worldwide 3M<sup>™</sup> MCS<sup>™</sup> Warranty unless 3M gives its prior written approval for the application.

- First surface images (the image is on top of the film) for opaque posters and signs, including:
  - Graphics for vans, personal vehicles, trucks and buses
  - Novelty posters
  - Retail and point-of-purchase displays
  - Information graphics such as maps and directories
  - Entertainment promotions in museums, zoos, parks, theatres, sports venues
  - Education and presentation graphics

- Legal and courtroom exhibits
- For flat or simple curved surfaces, with or without rivets, used in vertical (± 10°) applications

#### Limitations of End Uses

The following uses and applications are specifically NOT warranted.

- Fleet applications in areas that use salt for winter road maintenance
- Application to non-warranted substrates, including wallboard
- Applications subjected to gasoline vapors or spills
- Application to corrugated or highly irregular surfaces or sharply raised areas
- Graphics applied to stainless steel, including stainless steel vehicles
- On flat surfaces with rivets, tenting of 4 to 10 mm around rivets may be expected; rivets may be cut around to eliminate tenting.

Note: Standard ink jet technology is water based. Water-based chemistry is susceptible to the extremes of heat and humidity. This is a factor in most product constructions on the market. Read the Fabrication, Shelf Life and Storage sections in this bulletin. Staying in the middle of these ranges always provides optimum performance.

# **Compatible Products and Equipment**

#### Thermal link Jet Printing Systems

- Epson Stylus Pro 9500, Stylus Pro 10000 printer
  - Epson Archival Inks
- Epson Stylus Pro 10600 printer
  - Epson Archival Inks
- HP DesignJet Printers 2000 and 3000 series
  - HP DesignJet Ink System UV (pigment-based ink)
- HP DesignJet Printers 5000 series
  - HP83UV Color Ink System

#### Overlaminates (required)

- 3M™ Luster Overlaminate 8519 (semi-gloss)
- 3M ™ Matte Overlaminate 8520

Note: For the full product names of the 3M products listed on this page, please see page 1.

#### **Warranted Substrates**

Media 8522 is warranted for use on the following rigid substrates.

Some substrates may "out-gas", resulting in tiny bubbles throughout the surface of the graphic. For maximum performance, be sure the substrate you select is properly cleaned and prepared as recommended by the manufacturer. See Instruction Bulletin 5.1 for additional information.

- Alodine (anodized aluminum)
- · Automotive panels (automotive painted steel)
- Fruehauf (painted aluminum)
- FRP (fiberglass reinforced plywood)
- Glass
- Imron® (polyurethane-painted metal panel)
- Acrylic
- Sintra<sup>™</sup> board

# Test and Approve Non-warranted Substrates Before Use

Media 8522 is not warranted for any substrate other than those listed above. If you want to use it for other substrates, 3M recommends that you test and approve the media for both adhesion and removal characteristics.

#### Characteristics

Characteristic	Description	
Media	7 mil, white, opaque graphic film	1,7.4
Liner	Low-slippage, lay flat paper	
Adhesive	Changeable, pressure sensitive	
Thickness (media and adhesive)	7.5 to 8 mil (nominal)	p 5 - 2
Application substrates	See Warranted Substrates, above	
Application surfaces	Flat or simple curved surfaces, with or without rivets, used in vertical (± 10°) applications (no corrugations)	
Application temperature range	28° to 110°F (-2° to 43°C) (air and surface)	
Roll sizes	36" x 45 feet (914 mm x 13.5 m) 54" x 45 feet (1372 mm x 13.5 m)	

# How to Become a 3M Ink Jet Registered Fabricator

Only 3M Thermal Ink Jet Registered Fabricators are eligible to offer 3M MCS warranted graphics. In order to become certified, a fabricator must complete the requirements as specified in the 3M Ink Jet Graphics Registered Fabricator Reference Manual located on the 3M website at www. scotchprint.com

### **Effective Performance Life**

To obtain the warranty given below, the graphics must be made according to 3M's recommendations which are detailed in the Warranty and Limited Remedies on page 3. Also see the section, Removability.

# Warranted Durability

Media 8522	Epson Pr	inters	HP Printe	ers
Overlaminate 8519 or 8520	Outdoor	indoor	Outdoor	Indoor
Applied to 31 Warranted 3. Substrates	2 years	5 years	3 years	5 years

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### Removability

Imaging media 8522 is removable from warranted substrates for 1 year without the aid of chemical strippers or accessories. Refer to Instruction Bulletin 4.23 for additional information.

# **Fabrication**

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Graphics must be made according to 3M's recommendations which are detailed in the Warranty and Limited Remedies on page 3.  $+2-\varphi$ 

See Instruction Bulletin 4.23 for detailed fabrication, printing and mounting information.

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# **Graphic Construction Options**

#### Opaque (Reflective) Graphics

Opaque graphics made with imaging media 8522 require an overlaminate and an opaque substrate.

Viewer/Light Source	•
3.4	Overlaminate 8519, 8520 Adhesive on bottom
حند خ	Imaging Media 8522
<u> </u>	image on top; adhesive on bottom
Les	Opaque Substrate
·	
5.4.1	

Note: For the full product names of the 3M products listed on this page, please see page 1.

# Shelf Life and Storage

- 3M™ Scotchcal™ Changeable Opaque Imaging Media 8522 has a shelf life of one year.
- Storage conditions (new and partially used rolls). For optimum performance, use the middle of these ranges:
  - Original packaging, including plastic wrap
  - Relative humidity of 20% to 80%
  - Temperature of 33° to 104°F (0° to 40°C)
  - Away from direct sunlight
- Do not stack unprotected rolls or lay sharp or heavy objects on them.

# Health and Safety

# Caution

When handling any chemical products, read the manufacturers' container labels and the Material Safety Data Sheets (MSDS) for important health, safety and environmental information.

To obtain MSDS sheets for 3M products:

- By fax, call 1-800-364-0768 in the US and Canada or 1-650-556-8417 for all other locations.
- Electronically, visit us at http://www.3M.com/msds...
- By mail, or in case of an emergency, call 1-800-364-3577 or 1-651-737-6501.

When using any equipment, always follow the manufacturers' instructions for safe operation.

# **Warranty and Limited Remedies**

# 3M™ MCS™ Warranty for Graphics Produced on HP DesignJet Printers and Epson Stylus Pro Printers

The following is made in lieu of all other express or implied warranties, including any implied warranty of merchantability or fitness for a particular purpose: We warrant graphics produced by a 3M Ink Jet Registered Fabricator made with imaging media 8522, printed on an approved HP thermal ink jet printer according to HP's recommendations or Epson Stylus Pro printer according to Epson's recommendations, overlaminated with 8519 or 8520, and applied to a Warranted Substrate according to 3M's recommendations. These

Commercial Graphics Division

3M Center, Building 220-6W-06 PO Box 33220 St. Paul, MN 55133-3220 USA General Info. 1-800-374-6772 Technical Info. 1-800-328-3908

Fax 1-651-736-4233 Fax on-Demand 1-800-364-0768 US/Canada or 1-651-732-6506 International Fax-on-Demand document: 4506 w.w.w.scotchprint.com

3M Canada

P.O. Box 5757 London, Ontario Canada N6A 4T1 1-800-265-1840 Fax 519-452-6245 graphics are covered against failure caused by ultraviolet light, temperature extremes, pollution, and other elements.

If a graphic fails to perform in accordance with 3M product specifications within this time frame, 3M will replace the materials at no charge. These remedies are exclusive. In no case shall 3M be liable for any direct, indirect, or consequential damages, including any labor charges.

# 3M Related Literature

Listed below is related 3M technical literature that may be of interest. You may view and print these Bulletins from our Web site at www.scotchprint.com, or order them via our Faxon-Demand (FOD) system. Call one of these phone numbers to order the desired bulletins, and specify the FOD document number provided in the chart.

United States or Canada: 1-800-364-0768 International: 1-651-732-6506

International: 1-651-732-6506 Subject	Builetin No.	FOD No.				
Product Builetins						
3M <sup>™</sup> Scotchcal <sup>™</sup> Overlaminate 8519 and 8520	8519/8520	4524				
Instruction Bulletins		1.700				
Making thermal ink jet graphics	4.23	6523				
Application, substrate selection, preparation and substrate-specific application techniques	5.1	7001				
Warranties		9503				
Worldwide 3M MCS Warranty Packet (includes all Commercial Graphics MCS Wa	Worldwide 3M MCS Warranty Packet (includes all Commercial Graphics MCS Warranties)					
Worldwide 3M ™ MCS ™ Warranty Overv	iew-Folder	9504				

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# **Bulletin Change Summary**

The Epson Stylus Pro Printers 9500, 10000 10600, and Epson Archival lnks have been added to this bulletin. Additional changes resulting from this addition are marked with black bars in the margin.

3M México, S.A. de C.V. Av. Santa Fe No. 55 Col. Santa Fe, Del. Alvaro Obregón México, D.F. 01210 52-55-52-70-04-00 Fax 52-55-52-70-22-77

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3M Puerto Rico, Inc. Puerto Rico Industrial Park P.O. Box 100 Carolina, PR 00986-0100 787-620-3000 Fax 787-750-3035

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